Supporting Information

Plasmonic Gold Nanoparticles for ZnO-Nanotube Photoanode in Dye Sensitized Solar Cell Application

Marwa Abd-Ellah, Nafiseh Moghimi, Lei Zhang, Joseph. P. Thomas, Donald McGillivray, Kam Tong Leung¹



Figure S1. UV/Vis absorption spectra of GNP/ZnO-NT samples with GNPs obtained with deposition for 30, 60, 300, and 600 s, showing the similar absorbance in the visible region for deposition time above 300 s.

¹ E-mail: tong@uwaterloo.ca



Figure S2. Current density vs voltage profile of GNP/ZnO-NT based DSSC with agglomerated GNPs obtained by using a 10 mM AuCl₃ electrolyte.



Figure S3. UV/Vis absorption spectra of pristine ZnO-NT and GNP/ZnO-NT samples, showing the higher absorbance in the visible region after the gold nanoparticle loading step even in the absence of the N719 dye.